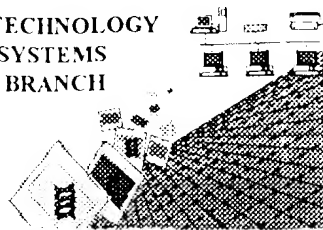


BIOTECHNOLOGY
SYSTEMS
BRANCH



1636
#14

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/6/2,8094
Source: 1650
Date Processed by STIC: 11/20/2002

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TECH CENTER 1600 2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER** **VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
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Revised 01/29/2002



1600

RAW SEQUENCE LISTING

DATE: 11/20/2002

PATENT APPLICATION: US/09/612,809A

TIME: 09:24:09

Input Set : A:\Iowa042.app

Output Set: N:\CRF4\11192002\I612809A.raw

1 <110> APPLICANT: SHEFFIELD, VAL C.
 2 ALWARD, WALLACE L.M.
 3 STONE, EDWIN M.
 4 NISHIMURA, DARRYL
 5 IATID, SHIVA
 6 <120> TITLE OF INVENTION: THERAPEUTICS AND DIAGNOSTICS FOR CONGENITAL HEART
 7 DISEASE BASED ON A NOVEL HUMAN TRANSCRIPTION FACTOR
 8 <130> FILE REFERENCE: IOWA:042USP1
 9 <140> CURRENT APPLICATION NUMBER: 09/612,809A
 10 <141> CURRENT FILING DATE: 2000-07-10
 11 <160> NUMBER OF SEQ ID NOS: 20
 12 <170> SOFTWARE: PatentIn Ver. 2.1
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 2264
 15 <212> TYPE: DNA
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 17 <400> SEQUENCE: 1

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 29 agtggtggga gaagggggac tgcctgttct ttctttttgt ctgttttccc cggtttgag 180
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 32 gagccagcc cagcgagcgc cgggagagga ggcagcgcag ccggacgcac aggcagcgg 360
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 35 ctcaaaagcg aactaaatcg aactccaaag caggaaaagg taagggaacc catcaaggca 540
 36 aaatcgaaac taaaaaaaa aaatccatt aaaaaaaacc cctgagaata ttaccacac 600
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 38 attttcttaa cggatttaatt cagagccacc tccacttgc ctgtgtctaa taacaaaa 720
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 52 ttaagcccat gaatcagcgg cggctctacc acggtgatgc ctgtgtggcg agagatggga 1560

Does Not Comply
 with the Rules of the
 American Chemical Society

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/612,809A

DATE: 11/20/2002

TIME: 09:24:09

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Output Set : N:\CRF4\11192002\I612809A.raw

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58 aaaaaatttt aaagcaataa caagaaagaa grrrraaqaa ccagaaacatt ttggtctagg 1920
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61 gtgatctgc ctgcacatca gactttgggg aaatctggat ttgattacag acgttcgggg 2100
62 aggttcgggg ctttcagttt gttttgagc taattcttt tcttgctatc tcttgcctct 2160
63 atctagaggg aacacttaag cagtattgc tcttcttt tgcacaaatt tctatctgt 2220
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6 <211> LENGTH: 553
6 <212> TYPE: PRT
6 <213> ORGANISM: Homo sapiens
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7 Ala Gly Gly Gly Tyr Thr Ala Met Pro Ala Pro Met Ser Val Tyr Ser
7 35 40 45
7 His Pro Ala His Ala Gln Gln Tyr Pro Gly Gly Met Ala Arg Ala Tyr
7 50 55 60
7 Gly Pro Tyr Thr Pro Gln Pro Gln Pro Lys Asp Met Val Lys Pro Pro
7 65 70 75 80
7 Tyr Ser Tyr Ile Ala Leu Ile Thr Met Ala Ile Gln Asn Ala Pro Asp
7 85 90 95
7 Lys Lys Ile Thr Leu Asn Gly Ile Tyr Gln Phe Ile Met Asp Arg Phe
7 100 105 110
7 Pro Phe Tyr Arg Asp Asn Lys Gln Gly Trp Gln Asn Ser Ile Arg His
7 115 120 125
7 Asn Leu Ser Leu Asn Glu Cys Phe Val Lys Val Pro Arg Asp Asp Lys
7 130 135 140
7 Lys Pro Gly Lys Gly Ser Tyr Trp Thr Leu Asp Pro Asp Ser Tyr Asn
7 145 150 155 160
7 Met Phe Glu Asn Gly Ser Phe Leu Arg Arg Arg Arg Arg Phe Lys Lys
7 165 170 175
7 Lys Asp Ala Val Lys Asp Lys Glu Glu Lys Asp Arg Leu His Leu Lys
7 180 185 190
7 Glu Pro Pro Pro Pro Gly Arg Gln Pro Pro Pro Ala Pro Pro Glu Gln
7 195 200 205
7 Ala Asp Gly Asn Ala Pro Gly Pro Gln Pro Pro Pro Val Arg Ile Gln
7 210 215 220
7 Asp Ile Lys Thr Glu Asn Gly Thr Cys Pro Ser Pro Pro Gln Pro Leu
7 225 230 235 240
7 Ser Pro Ala Ala Ala Leu Gly Ser Gly Ser Ala Ala Ala Val Pro Lys

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RAW SEQUENCE LISTING

DATE: 11/16/2002

PATENT APPLICATION: US/09/612,809A

TIME: 09:24:09

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Output Set: N:\CRF4\11192002\I612809A.raw

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126          275          280          285
128 Asp Ser Ala Pro Pro Pro Pro Ala Pro Ser Ala Pro Pro Pro His His
129          290          295          300
131 Ser Gln Gly Phe Ser Val Asp Asn Ile Met Thr Ser Leu Arg Gly Ser
132 305          310          315          320
134 Pro Gln Ser Ala Ala Ala Glu Leu Ser Ser Gly Leu Leu Ala Ser Ala
135          325          330          335
137 Ala Ala Ser Ser Arg Ala Gly Ile Ala Pro Pro Leu Ala Leu Gly Ala
138          340          345          350
140 Tyr Ser Pro Gly Gln Ser Ser Leu Tyr Ser Ser Pro Cys Ser Gln Thr
141          355          360          365
143 Ser Ser Ala Gly Ser Ser Gly Gly Gly Gly Gly Gly Ala Gly Ala Ala
144          370          375          380
146 Gly Gly Ala Gly Gly Ala Gly Thr Tyr His Cys Asn Leu Gln Ala Met
147 385          390          395          400
149 Ser Leu Tyr Ala Ala Gly Glu Arg Gly Gly His Leu Gln Gly Ala Pro
150          405          410          415
152 Gly Gly Ala Gly Gly Ser Ala Val Asp Asn Pro Leu Pro Asp Tyr Ser
153          420          425          430
155 Leu Pro Pro Val Thr Ser Ser Ser Ser Ser Ser Leu Ser His Gly Gly
156          435          440          445
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159          450          455          460
161 Ala His Gln Gly Arg Leu Thr Ser Trp Tyr Leu Asn Gln Ala Gly Gly
162 465          470          475          480
164 Asp Leu Gly His Leu Ala Ser Ala Ala Ala Ala Ala Ala Ala Gly
165          485          490          495
167 Tyr Pro Gly Gln Gln Gln Asn Phe His Ser Val Arg Glu Met Phe Glu
168          500          505          510
170 Ser Gln Arg Ile Gly Leu Asn Asn Ser Pro Val Asn Gly Asn Ser Ser
171          515          520          525
173 Cys Gln Met Ala Phe Pro Ser Ser Gln Ser Leu Tyr Arg Thr Ser Gly
174          530          535          540
176 Ala Phe Val Tyr Asp Cys Ser Lys Phe
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180 <210> SEQ ID NO: 3

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182 <212> TYPE: DNA

183 <213> ORGANISM: Homo sapiens

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188 cgggcgcgc tgcgcgcgc ctgcgcgcct gccgcgcgc gccgcgcgc gccgcgcgc 180
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RAW SEQUENCE LISTING

DATE: 11/20/2002

PATENT APPLICATION: US/09/612,809A

TIME: 09:34:09

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193 cggcagcaga ggaagccggg caagggcagg tactggaagg tggaccggga ctcttacaac 480
194 atgttcgata atggcagctt cctggggggg cgggggggtt tcaagaagaa ggaagcgggtg 540
195 aaggacaaag aggaagaagg caggctgcac ctcaaggagg cggcccccct cggcccccag 600
196 ccccccctcg ccccgccgga gcagcccaac gcaaaaggcg cgggtccgaa ggcggcgcc 660
197 gtgcacatc atgacatcaa gacggaagac gataatgccc cctcgccgca ccagcccttg 720
198 tccggggggg cggccctggg caggggcagg cggggggggt tgcraagat cgaagacccc 780
199 gacacagaa gtagcagcct ctccagcagg aacacacccc cgggtagcct gcgttcggcg 840
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209 caccaccccg cggccaccca aggcgccttc aactcgttgt aactgaacca ggcgggggga 1440
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211 cagcagaact tcaatcggg cggcgagatg tttagctcac agaggatcgg cttagaacac 1560
212 tctcagctga atgggaatg tagctgttaa atgacttccc ctccacgcca gtctctgtac 1620
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217 <211> LENGTH: 106

218 <212> TYPE: PRT

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221 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

222 Peptide

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226 Met Ala Ile Gln Asn Ala Pro Asp Lys Lys Ile Thr Leu Asn Gly Ile

227 20 25 30

228 Tyr Gln Phe Ile Met Asp Arg Phe Pro Phe Tyr Arg Asp Asn Lys Gln

229 35 40 45

230 Gly Trp Gln Asn Ser Ile Arg His Asn Leu Ser Leu Asn Glu Cys Phe

231 50 55 60

232 Val Lys Val Pro Arg Asp Asp Lys Lys Pro Gly Lys Gly Ser Tyr Trp

233 65 70 75 80

234 Thr Leu Asp Pro Asp Ser Tyr Asn Met Phe Glu Asn Gly Ser Phe Leu

235 85 90 95

236 Arg Arg Arg Arg Arg Phe Lys Lys Lys Asp

237 100 105

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239 <411> LENGTH: 106

240 <412> TYPE: PRT

241 <413> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

DATE: 11/20/2002

PATENT APPLICATION: US/09/612,809A

TIME: 09:24:09

Input Set : A:\Iowa042.app

Output Set: N:\CRF4\11192002\I612809A.raw

253 <120> FEATURE:

254 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

255 Peptide

256 <400> SEQUENCE: 5

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260 20 25 30

261 Tyr Gln Ile Ile Met Asp Arg Phe Phe Tyr Arg Glu Asn Lys Gln

262 35 40 45

263 Lys Trp Gln Asn Ser Ile Arg His Asn Leu Ser Leu Asn Glu Cys Phe

264 50 55 60

265 Val Lys Val Pro Arg Asp Asp Lys Lys Pro Gly Lys Gly Ser Tyr Trp

266 65 70 75 80

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273 <112> TYPE: PRT

274 <113> ORGANISM: Artificial Sequence

275 <220> FEATURE:

276 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

277 Peptide

278 <400> SEQUENCE: 6

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280 1 5 10 15

281 Met Ala Ile Gln Ser Ser Pro Gly Gln Arg Ala Thr Leu Ser Gly Ile

282 20 25 30

283 Tyr Arg Val Ile Met Gly Arg Phe Asa Phe Tyr Arg His Asn Arg Pro

284 35 40 45

285 Lys Trp Gln Asn Ser Ile Arg His Asn Leu Ser Leu Asn Glu Cys Phe

286 50 55 60

287 Val Lys Val Pro Arg Asp Asp Arg Lys Pro Gly Lys Gly Ser Tyr Trp

288 65 70 75 80

289 Thr Leu Asp Pro Asp Cys His Asp Met Phe Glu His Gly Ser Phe Leu

290 85 90 95

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292 100 105

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294 <111> LENGTH: 106

295 <112> TYPE: PRT

296 <113> ORGANISM: Artificial Sequence

297 <220> FEATURE:

298 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

299 Peptide

300 <400> SEQUENCE: 7

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<212> TYPE: PRT

<213> ORGANISM: Artificial Sequence

<220> FEATURE:

<223> OTHER INFORMATION: :

<400> SEQUENCE: 16

see p. 7 for interpretation

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/612,809A

7
DATE: 11/20/2002
TIME: 09:24:10

Input Set : A:\Iowa042.app
Output Set : N:\CRF4\11192002\I612809A.raw

Use of <220> Feature(NEW RULES):

Sequence(s) __ are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Msg#:16

.. VERIFICATION SUMMARY

DATE: 11/20/2002

PATENT APPLICATION: US/09/612,809A

TIME: 09:24:10

Input Set : A:\Iowa042.app

Output Set: N:\CRF4\11192002\I612809A.raw

1:000 M:258 W: Mandatory Feature missing, <130> Tag not found for SEQ#:16, <213>
ORGANISM:Artificial Sequence

1:000 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16, <213>
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1:000 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16, Line#:605